EQUIPPING THE TOTAL ARMY

AND

POMCUS SETS 5 AND 6

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Unless otherwise indicated, all years referred to in the text are fiscal years. All dollars are constant 1985 budget authority dollars.

PREFACE

As the Congress considers the defense budget for fiscal year 1985, one important issue will be the Administration's program for Prepositioned Materiel Configured to Unit Sets (POMCUS). The POMCUS program prepositions equipment in Europe so that it can be used quickly in the event of war. In fiscal year 1984, the Congress appropriated funds for the expansion of POMCUS from four sets to six, but directed that the Army not proceed with equipping POMCUS sets 5 and 6 until active-duty units were equipped at 70 percent and reserve units were equipped at 50 percent of requirements. This restriction will expire at the end of this fiscal year, so the Congress must decide whether or not to continue the restriction or modify it in some way. This study provides information relating to that decision by analyzing both the Army's ability to meet the thresholds the Congress has established and the costs of filling any shortages. The study also examines the Army's ability to meet higher thresholds suggested by an Army study, as well as the effects of procurement reduced below the Administration's planned level. The study was prepared at the request of the Subcommittee on Defense of the Senate Committee on Appropriations. In keeping with the Congressional Budget Office's mandate to provide objective analysis, this paper offers no recommendations.

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SUMMARY

Should a war erupt in Europe, the United States has pledged to its NATO allies to commit its roughly 215,000 Army troops already stationed there and deploy another six Army divisions now based in the United States, plus numerous support units, as well. To allow deployment of the U.S.-based reinforcements to occur within ten days, the Department of Defense (DoD) has already initiated a program of Prepositioned Materiel Configured to Unit Sets (POMCUS). Prepositioning of equipment can obviate the need to transport cumbersome combat and combat support gear, potentially saving critical time.

Already, four division sets of POMCUS equipment are in place, and the Congress has approved the Army's continuing with another two—but with certain constraints. The Congressional Budget Office has examined the effects of those restrictions on expanding the POMCUS program and on the costs of meeting potential equipment shortfalls. CBO has not, however, taken up broader budgetary issues concerning the desirability and costs of various Army equipment programs.

CONGRESSIONAL RESTRICTIONS

For five years, the Congress has denied Administration requests for funds to expand POMCUS by two additional division sets. Attention has focused mainly on the potential diversion or withdrawal of equipment from the Army's active and reserve forces to fill the POMCUS stocks. Critics of the POMCUS expansion have voiced concerns about possible erosions in readiness of U.S.-based forces and reduced flexibility of those units, should they be needed in theaters outside NATO Europe. (Korea and the Persian Gulf region, for example, are considered potential areas of concern outside NATO.) The vulnerability of POMCUS storage sites to enemy attack is another source of uneasiness.

In fiscal year 1984, however, the Congress appropriated funds to expand POMCUS as part of the DoD Appropriation Bill for fiscal year 1984. At the same time, though, the Congress directed that, to minimize the risk of eroded readiness, the Army not proceed to equip POMCUS sets 5 and 6 until active-duty units have at least 70 percent of their equipment

requirements and reserve units at least 50 percent—the minimal levels referred to as the 70/50 thresholds. This year, the Congress must decide whether to continue, modify, or cancel these restrictions.

KEY QUESTIONS THE RESTRICTIONS RAISE

The statutory restrictions raise several key questions:

- Can the Army meet the restrictions and so continue to equip POMCUS stocks in fiscal year 1984?
- What effects do changing requirements and planned deliveries of new equipment have on the Army's ability to continue to equip POMCUS through fiscal year 1989?
- Since the Congress appears likely to fund Army procurement at a level lower than the Administration has requested, will the Army still be able to meet the 70/50 thresholds with lower procurements?
- What could be the effects of raising the thresholds above the 70/50 levels, as a 1980 Army study has suggested?
- What costs would be entailed in fully meeting all Army equipment needs by fiscal year 1989?

THE ARMY'S ABILITY TO MEET THE THRESHOLDS IN 1984 AND 1989

The legislative language about the 70/50 thresholds is unclear. It does not, for example, make clear whether high-priority Army units, such as those active units that are forward deployed in Europe or Korea, must be fully equipped—as they typically have been in the past—or whether these units need only meet the current 70 percent thresholds. Thus, to assess the Army's ability to meet the equipment thresholds, CBO has considered two possible interpretations of the 70/50 thresholds that vary in how equipment would be distributed to active and reserve units.

For both interpretations—illustrated in the text box that follows—CBO's analysis considers only 22 of a possible 100 types of equipment that are or will be prepositioned in POMCUS sets 1 through 6. But these 22 items, representing the heaviest and most complex equipment, account for

TWO ANALYTIC CASES FOR EQUIPMENT DISTRIBUTION

Case 1 follows the Army's objectives for distributing materiel by attempting to equip all the active-duty and reserve forces to 100 percent of their requirements starting with the highest-priority units (as ranked in the table below). Thus, Case 1 is much more stringent than current law and illustrates the Army's ability to meet the thresholds without modifying its preferred distribution scheme.

Case 2 departs from the Army's distribution objectives and assesses the extent to which the law itself, not the Army's likely scheme, is restrictive. It takes advantage of the statute's flexibility but adopts a strict interpretation. Specifically, Case 2 would still equip at 100 percent of requirements the forward deployed and rapid deployment forces and Army training units, because these units would fight early. The remaining active units based in the United States and any reserve units designated to go to POMCUS stocks would be equipped at 70 percent; all other reserve units would receive 50 percent. Case 2 would also allow the Army to redistribute equipment among units; excesses would be redistributed from oversupplied to undersupplied units.

Army Claimants on Equipment (In sequence of fill)	Percentage Goals for Distribution	
	Case 1	Case 2
Forward Deployed Forces	100	100 a/
Rapid Deployment Forces	100	100 a/
Active Training Base	100	100 a/
Active Units in United States	100	70 b/
Reserve Units in POMCUS	100	70 b/
All Other Reserve Units	100	50 b/
POMCUS Sets 1 through 4 (current)	100	100
POMCUS Sets 5 and 6 (under way)	100	100
War Reserve Stocks	100	100

SOURCE: Congressional Budget Office.

a. Items of equipment would be redistributed out of units that have in excess of 100 percent and into lower-priority units.

b. Items of equipment would be redistributed out of those units now above their 70/50 goals and into lower-priority units.

80 percent of the dollar value of POMCUS stocks. The 22 include eight combat items (including tanks, fighting vehicles, and howitzers) and 14 combat support items (including trucks, radios, and generators).

Case 1—Assuming the Army's Distribution Objectives

Following the Army's distribution objectives, Case 1 would attempt to equip all active and reserve forces to 100 percent of their requirements, starting with the highest-priority units. Thus, forward deployed units would be equipped first, followed by those units available to the Rapid Deployment Forces (RDF) and other active units. Remaining equipment, if any, would be distributed to reserve units, POMCUS, and war reserve stocks—that is, the equipment needed to replace combat losses in the early days of a war before assembly lines could begin producing new equipment. The equipment thresholds implied in Case 1 are much stricter than those contained in current law. Thus, this case illustrates the Army's ability to meet the 70/50 thresholds without modifying its preferred distribution scheme.

Case 1 would allow the Army to place in POMCUS all but one of the types of combat equipment considered in the CBO study (see Summary Table 1). This would be true in both 1984 and 1989. (The one exception would be the Bradley Fighting Vehicle.)

For combat support equipment, however, the picture would change. Though all but two of the 14 combat support items would meet the 70/50 thresholds in fiscal year 1984, few assets would remain to fill the POMCUS stocks. By fiscal year 1989, the Army's ability to fill the POMCUS stocks would be reduced still further because in general, Army requirements are increasing faster than numbers of assets are growing. Thus, assuming the Army's distribution objectives, the lack of available assets would essentially prohibit the Army from proceeding to place major combat support items in POMCUS sets 5 and 6.

Cost Effects. In dollar terms, the equipment shortfalls occasioned by Case 1 would be significant. By 1989, the value of equipment unavailable to POMCUS would amount to $5.0 billion (see Summary Table 1). Lacking combat support equipment would account for a major share of that shortfall.

All these results assume that the Army's current procurement plans are followed. The effects of changed procurement plans are treated in more detail below.

SUMMARY TABLE 1. COMPARISON OF ALTERNATIVE DISTRIBUTION PLANS WITH PRESENT AND SLOWER PROCUREMENT RATES

Number of Items Not Qualifying				Dollar Shortfall (-) for POMCUS Sets 1 through 6 a/ (In billions)	
1984		1989			
Combat	Combat Support	Combat	Combat Support	1984	1989
CASE 1. ARMY DISTRIBUTION OBJECTIVE (70/50 thresholds, Administration's procurement plans)					
1	2	1	4	-2.5	-5.0
(With reduced procurement)					
--	--	2	5	--	-5.4
CASE 2. STRINGENT INTERPRETATION OF LAW (70/50 thresholds, Administration's procurement plans)					
1	2	1	2	-1.6	-3.1
(With reduced procurement)					
--	--	2	4	--	-3.7
CASE 3. MELT THRESHOLDS (70/70 thresholds, Administration's procurement plans)					
1	6	3	8	-2.5	5.0
(With reduced procurement)					
--	--	3	10	--	5.4

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study: eight in the combat category and 14 in the combat support category.

a. Data represent the one-time costs of filling POMCUS sets 1-6 for items in CBO's study, assuming shortages implied by alternative distribution plans and slowed procurement rates.

Case 2--Assuming a Stringent Interpretation of Current Law

To help judge the restrictiveness of the law itself, as opposed to the Army's distribution objectives, CBO constructed a strict interpretation of the statute as Case 2. Though stringent, Case 2 would nonetheless take advantage of the flexibility in the law. Specifically, Case 2 would still attempt to equip fully those forces that are forward deployed or available to the RDF, since they could be involved in the initial phase of a conflict. Units that constitute the Army's training establishment would also be provided full complements of their requirements, since they would be needed to train soldiers and to provide an initial base for mobilization. But consistent with the Congressional language, the remaining active units based in the United States--many of which are earmarked for POMCUS--would be equipped at only 70 percent of wartime requirements. Likewise, any reserve units designated for deployment to POMCUS would be equipped at 70 percent. Finally, all other reserve units would be equipped at 50 percent of their requirements. Case 2 would also allow the Army to redistribute equipment among units; thus, units with equipment in excess of amounts required by law would supply those that are lacking assets. (In reality, the Army would not redistribute equipment around the world, because doing so is costly and violates Army priorities; no redistribution is assumed in Case 1. Nonetheless, assuming redistribution helps guage the Army's ability to meet the 70/50 thresholds.)

If the Army departed from its likely distribution plan and followed Case 2, the picture would improve. Requirements would be less, and equipment could be redistributed. The Army would still be able to place most combat items in POMCUS, though again, the Bradley Fighting Vehicle would still fail to meet thresholds in both 1984 and 1989. But Case 2 would allow the Army to place in POMCUS substantial numbers of most types of combat support equipment. Owing to lower requirements and redistribution, by 1989 only two of the 14 combat support items would fail to meet the thresholds, and most would be substantially represented in POMCUS.

Cost Effects. The dollar shortfall under Case 2 would diminish to $3.1 billion--nearly $2 billion less than under Case 1.

THE EFFECTS OF HIGHER THRESHOLDS AND SLOWER PROCUREMENT

The Administration and the Congress have already indicated that they intend to slow the rate at which new equipment will be purchased. At the same time, a 1980 Army study suggested that equipment thresholds be

raised above the 70/50 levels. CBO has tested the implications for POMCUS of both possibilities—first one by one, then together.

Reduced Procurement

Reducing planned procurements would degrade, but not greatly, the Army's ability to meet the thresholds and to equip POMCUS. CBO's conclusions derive from an assumption of no increases in procurement above those approved by the Congress in fiscal year 1984. This is a substantial reduction: in the 1985-1987 period, it would reduce by one-fourth the costs of the 22 items considered in this study. But as Summary Table 1 shows, only one more combat item would fail to meet the 70/50 thresholds, and only one or two more combat support items would fail, depending on the analytic case.

Cost Effects. Reduced procurement would cause the dollar value of the shortfall in POMCUS to increase by 8 percent—to $5.4 billion—under the Army distribution objective (Case 1) and by 19 percent—to $3.7 billion—under a stringent interpretation of the law (Case 2).

Higher Thresholds Set at MELT Levels

POMCUS plans would be more seriously affected by the increased thresholds suggested by an Army study. To assess the effects of equipment withdrawals on the forces' peacetime readiness, the Army completed two studies in 1980 that examined the minimum equipment levels for training (MELT). For the active units, a field test was conducted to measure whether tactical proficiency could be maintained if active units were equipped at 70 percent of requirements. For reserves, a survey of reserve commanders was conducted to determine appropriate levels of equipment for their units.

Results of the active forces' test suggest that peacetime training proficiency could be maintained with 70 percent of equipment, provided increased training time and increased resources were available. Sharing or "pooling" equipment—a technique used by many undersupplied reserve units--was the key to maintaining proficiency. Though there were disadvantages to reducing equipment, the test did lend some credibility to the 70 percent threshold now in the law.

The results of the reserve test differ, however. Reserve commanders stated that withdrawing equipment to 50 percent of requirements would

adversely affect peacetime training and combat capabilities after mobilization. Though no appropriate equipment level was established for all reserve units, owing to different missions and planned deployment times, the study suggested that reserve forces deploying within the first 30 days after mobilization should be fully equipped, and all other reserve units should be equipped at 70 percent. Though these results represent the judgment of reserve commanders and have not been tested in the field, they do not support the 50 percent threshold.

Case 3--Higher Thresholds. Case 3 represents the higher reserve thresholds suggested by the MELT study--that is, early-deploying reserves equipped at 100 percent and all other reserve units equipped at 70 percent. The higher thresholds would restrict the Army's ability to equip POMCUS. By 1989, three of eight combat items and eight of 14 combat support items would not meet the higher thresholds (see Summary Table 1). As was noted above in connection with the Army's objective, these substantial shortfalls would essentially preclude placement of many items in POMCUS.

Cost Effects. Dollar shortfalls would climb to $5.0 billion. Indeed, adhering to the MELT thresholds would have the same effects on the dollar shortage in POMCUS sets 1 through 6 as would adhering to the Army's objective distribution.

Reduced Procurement With Higher Thresholds

Reduced procurement together with higher thresholds for the reserves would even more seriously hamper the Army's ability to expand POMCUS. Under these conditions, more than one-half of the items--including ten of the 14 support items--would not meet the thresholds in fiscal year 1989.

Cost Effects. Under this scenario, the POMCUS shortfall would reach $5.4 billion--a shortfall 50 percent higher than under Case 2 and identical to that occurring under Case 1.

IMPLICATIONS FOR FISCAL YEAR 1989

Clearly, the Army does not now have, nor is it purchasing, enough equipment to meet the needs of all its active and reserve units while at the same time meeting the POMCUS program's needs. Some Members of Congress have therefore argued that additional equipment to fill POMCUS stocks should be bought and no more withdrawn or diverted from active and

reserve forces. This approach, though obviously costly, would minimize risk. Others have argued that the Army should also buy enough equipment to fill war reserves stocks.

CBO has estimated the costs of meeting Army equipment needs for the 22 items it has considered. All costs are expressed as additions to spending planned in the President's February 1984 budgetary proposal. Also, these are one-time costs; in actual practice, equipment shortfalls might have to be met over a period of years because of the need to expand production facilities.

Cost Effects

The one-time added costs of filling shortages by fiscal year 1989 would range from $2.7 billion to $17.5 billion (see Summary Table 2). The range would depend on what is meant by "full" equipment, and on what forces and stocks are to be filled. Depending on the emphasis of policy, the Army or the Congress could choose to fill the needs of one or more of the forces and stocks.

Filling the equipment needs of the active and reserve forces would be consistent with an emphasis on peacetime training needs and a decision to keep active and reserve units highly ready. Costs to fill these needs would range from $2.7 billion to $8.6 billion. The lower number assumes that "full" reflects current law as strictly interpreted—that is, maintenance of the 70/50 thresholds. The higher number assumes that all wartime requirements are fully met for both active and reserve units.

Equipping POMCUS fully would be consistent with a desire to speed the deployment of troops in the event of war. It would also be consistent with a judgment that POMCUS is a national program that imposes requirements on the Army because of the interests of the NATO alliance. Added costs would range from $3.1 billion to $5.0 billion. Both estimates assume all POMCUS requirements are met. The range depends on what fractions of the needs of active and reserve forces are met before filling POMCUS. The lower number assumes the 70/50 thresholds; the higher number assumes 100 percent fill of all wartime needs for all active and reserve forces.

Meeting war reserve requirements, which would ensure enough equipment on hand to provide combat replacements for the first 30 days of combat, is consistent with an emphasis on the Army's ability to sustain combat. Added costs range from $2.9 billion to $3.9 billion. Again, both

costs assume that war reserve needs are fully met. The costs differ in how much equipment might be diverted to meet needs of the active and reserve forces before any became available for meeting the war reserves.

Finally, if all three needs were met—that is, active and reserve units, POMCUS, and the war reserve stocks—added costs would range from $8.7 billion to $17.5 billion for the 22 items of equipment CBO considered. Of course, full costs to meet all the Army's needs for all items of equipment would be higher, because many more items of equipment would in fact be involved.

SUMMARY TABLE 2. ADDED COSTS TO FILL ARMY EQUIPMENT NEEDS BY FISCAL YEAR 1989
(In billions of 1985 dollars)

Units and Categories (In sequence of fill)	Case 1		Case 2		Case 3	
	Percent Fill	Added Costs	Percent Fill	Added Costs	Percent Fill	Added Costs
Active and Reserve Units						
Forward Deployed	100		100		100	
RDF	100		100		100	
Training Base	100		100		100	
Active Units in POMCUS	100	8.6	70	2.7	70	6.4
Active Units in United States	100		70		70	
Reserve Units in POMCUS	100		70		70	
Other Reserve Units	100		50		70	
POMCUS Sets 1-6	100	5.0	100	3.1	100	5.0
30 Days of War Reserves	100	3.9	100	2.9	100	3.9
Total		17.5		8.7		15.3

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study.

CHAPTER I. THE POMCUS PROGRAM IN THE CONTEXT OF TODAY'S ARMY

A key feature in recent Administrations' national defense planning has been the program for Prepositioned Materiel Configured to Unit Sets (POMCUS). The goal of the POMCUS program is to speed deployment of U.S. Army ground troops, should war erupt in Europe. Until now, equipment for four division sets has been prepositioned in Europe, most of it warehoused at stations in the Federal Republic of Germany (West Germany). Last year, at the Administration's request, the Congress agreed to augment the number of POMCUS sets to six, but it placed certain constraints on the Army's proceeding with the additions. Specifically, the Congress declared that no equipment could be placed in the two additional POMCUS sets (a division set consists of assorted equipment from tanks to spare parts) until the Army met at least 70 percent of the equipment needs of its active forces and 50 percent of the needs of its reserves—the so-called 70/50 thresholds. This study examines the Army's ability to meet these required thresholds and the potential costs of filling any shortfalls.

THE U.S. ARMY AS A PART OF THE NATO DEFENSE

The defense of Europe remains the cornerstone of U.S. national security policy, though the United States must be prepared to meet challenges in other distant theaters such as Central America, the Persian Gulf, or Korea. Together with the forces of the 15 other member nations of the North Atlantic Treaty Organization (NATO), the United States' forces are conceived as a deterrent against attack by the Warsaw Pact forces. Should the deterrence stratagem fail, however, all NATO member nations are pledged to regard an attack on one as an attack on all. Accordingly, if a war should occur, each member is committed to assign defense forces to the NATO military command. Altogether, some 980,000 active ground forces and more than 900,000 reserves from the European allies would join the U.S. Army. So too would substantial forces from the air forces and navies of the United States and its NATO allies.

Configuration of the Army's Active-Duty Forces. To meet its various commitments, the U.S. Army currently has approximately 780,000 combat troops on active duty. Active-duty personnel are organized into 16

divisions, most consisting of 16,000 to 18,000 apiece. There are also separate brigades and regiments, most of which have 4,000 to 5,000 troops. These divisions are complemented by numerous support forces, ranging in function from maintenance and support to medical. The Army currently plans to reorganize the structure and equipment of some of its light infantry divisions over the next five years.

The Reserves. In addition to its active forces, the Army has 691,000 reserve personnel who drill regularly either in the Army National Guard or the Army Reserve. Reserves are organized into nine combat divisions plus many separate brigades and other, smaller units.

U.S. Troops Overseas

Consistent with the United States' commitment to NATO, some 215,000 active U.S. Army troops—including support forces—are now stationed in Europe. The Army today deploys in Europe four divisions, three brigades, and two armored cavalry regiments. (Two of the three combat brigades are affiliated with active-duty divisions in the continental United States and are designated to serve as the leading components for these divisions in the event of a war.) Should a NATO/Warsaw Pact war erupt, these units could eventually be reinforced by 11 active-duty and nine National Guard divisions dispatched from the continental United States. The U.S. reinforcement program would be implemented in consonance with reinforcements of all other NATO forces. To defeat a concerted Warsaw Pact attack, the NATO allies would not only have to provide substantial military strength, they would also have to amass this strength quickly. Many military planners envision any Warsaw Pact assault as rapid and large. Thus, the United States is commited to provide ten divisions to NATO within ten days after mobilization.

The Role of POMCUS

To meet this commitment, the Department of Defense has implemented a program known as POMCUS (Prepositioned Materiel Configured to Unit Sets). Equipment for Army divisions and for numerous nondivisional support units (such as hospital units or engineer units) is prepositioned overseas. Prepositioning equipment in a theater where it may be used avoids the loss of valuable time to transoceanic shipment. In the event of war, U.S. troops would be flown quickly to Europe, where their equipment would await them. Thus, the POMCUS program should allow speedy deployment of initial reinforcements. From the standpoint of the United States' NATO

allies, a six-division-set POMCUS program—implying inclusion of the two additional sets the Administration seeks—is necessary to fulfill the agreement codified in the NATO Long-Term Defense Program (LTDP) of 1978.

Army Modernization

Uneasiness about the current military balance between NATO and the Warsaw Pact has not only prompted the Administration to emphasize POMCUS; it has also led to modernization of Army equipment. Throughout this decade, more than 100 new items of combat and combat-support equipment—from vehicles to firearms to communications gear—will be introduced into the Army's active and reserve forces and placed in POMCUS stocks. A glossary on page 6 enumerates some of the new hardware.

This modernization will be expensive. Over the next five years, the Administration plans, according to its own estimate, to invest more than $42.8 billion to purchase 17 major modernization systems. 1/ Beyond that, the cost of ownership—that is, operating and support costs—will also increase as these new systems are introduced into the Army's inventories.

The Balance of Forces in Europe

Together, equipment modernization and prepositioning in Europe may do little more, according to analysis by the Congressional Budget Office, than maintain the current NATO/Warsaw Pact balance of forces. Indeed, CBO estimates that, assuming that the Warsaw Pact continues to modernize its forces at the present rate and improve its combat capabilities, the Administration's program to modernize Army equipment and expand POMCUS will merely maintain the current force balance through 1990. 2/

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1. Costs reported in this study for 17 major systems included in Selected Acquisition Reports published by the Department of Defense.

2. See Congressional Budget Office, Army Ground Combat Modernization for the 1980s: Potential Costs and Effects for NATO (November 1982) and testimony by Dr. Alice Rivlin, Director, Congressional Budget Office, before the U.S. Senate, Committee on Appropriations, Subcommittee on Defense, 21 June 1983.

To many analysts in the Administration, the need to maintain the current balance of forces has underscored the need to emphasize the Army modernization effort and increase the POMCUS program. The Congress has generally supported the modernization program; slowdowns have usually occurred only because of fiscal constraints. But the Congress has expressed many concerns about the POMCUS program.

CONGRESSIONAL CONCERNS ABOUT THE POMCUS PROGRAM

For the last five years, the Congress has refused the Administration's requests for funds to expand the POMCUS program. The major concern has centered on the potential diversion of modernized equipment from the active and the reserve forces to fill POMCUS sets.

To fill POMCUS, the Army "borrows" equipment from its U.S.-based stockpile of equipment for wartime reserves. 3/ The stockpile would be reconstituted from equipment that is left behind after a mobilization, when the units departed for Europe and were able to draw their prepositioned equipment. But strictures on funding and other priorities have sometimes left war reserve stocks too low to meet all POMCUS requirements. Because POMCUS is a high-priority program with high political visibility—NATO funds the construction of POMCUS warehouses through an alliance-wide program—the Army may have diverted equipment from active and reserve units to meet POMCUS needs. The Congress has been concerned that such diversions for POMCUS could weaken peacetime readiness levels.

The Congress has also been concerned about the potential limitations on the United States to respond to crises outside NATO Europe if more equipment is prepositioned in Europe. In light of budgetary limits, the need to place equipment in the POMCUS stocks competes with needs to equip the Army and other services to fight in such other areas as Southwest Asia. Finally, the Congress has expressed concern about the vulnerability of storage sites; a rapid attack that overran the sites before equipment was withdrawn would deliver a severe blow to NATO's forces. 4/

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3. War reserve stocks are items of equipment that would be needed to replace combat losses in a war before assembly lines could begin producing new equipment.

4. Responding to concerns of the vulnerability of POMCUS stocks, the DoD argues that these sites are protected by continuous patrol against sabotage and by ground-to-air missiles against air strikes.

CONGRESSIONAL ACTION IN 1984

In fiscal year 1984, the Congress agreed to appropriate funds for the expansion of POMCUS to six sets, but it directed that the Army not proceed with equipping POMCUS sets 5 and 6 until active units were equipped at 70 percent and reserve units were equipped at 50 percent (the 70/50 thresholds mentioned above). The equipment thresholds of 50 and 70 percent stem from 1979 Army testimony, when, following ratification of the LTDP, the Department of Defense (DoD) initially committed the Army to placing two additional equipment sets in POMCUS. 5/ The Army's testimony stated that, to fill the POMCUS sets, the Army would withdraw equipment from U.S.-based units. These withdrawals would not exceed 30 percent of the equipment required for active units designated for POMCUS nor 50 percent of equipment for later deploying reserve units. Presumably, the thresholds—since they were originally suggested by the Army—would not adversely affect the forces' peacetime readiness. Thus, the Congressional restrictions represent a compromise that would allow POMCUS to go ahead, while it would minimize the risk of withdrawals that would weaken readiness.

These 70/50 thresholds were contained in the DoD's 1984 Appropriations Act, which will expire at the end of this fiscal year. Thus the Congress will have to decide whether to discontinue the restrictions, continue them in their current form, or modify them substantially.

PLAN OF THE STUDY

This study examines the ability of the Army to meet the thresholds established by the Congress as well as the costs of filling any shortfalls. Chapter II examines the ability of the Army to meet the thresholds established by current law, assuming that the Army receives the equipment that it planned to buy in the February 1984 budget. Chapter III examines the ability to meet higher thresholds suggested by an Army study, as well as the effects of reducing procurement below the February 1984 planned levels. Finally, Chapter IV examines the costs of meeting the equipment shortfalls implied by the various thresholds.

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5. See Department of Defense Appropriations Act for 1980, Hearings before a Subcommittee of the Committee on Appropriations, U.S. House of Representatives, 96th Congress, 1st Session, p. 872.

SELECTIVE GLOSSARY

Combat Equipment

M1 Tank. The Army's newest tank, the M1, will replace the current-generation M60 series tank. The M1 is equipped with a 105-millimeter gun and incorporates special armor, a laser rangefinder, integrated sight, and a 1,500 horsepower turbine engine. Fielding of the M1 began in 1981.

Bradley Fighting Vehicle System. Also called the M2/M3, the FVS will replace the current M113 armored personnel carrier. The FVS has special armor and a thermal sight. The two-man turret mounts a 25-millimeter cannon and also carries a TOW (defined below) antitank guided missile. Fielding of the FVS began early in 1983.

Multiple Launch Rocket System. An artillery rocket system, the MLRS will complement cannon artillery. The MLRS is designed to counter enemy artillery or air defense. It can deliver 16 warheads that carry conventional submunitions. Procurement of MLRS began in fiscal year 1980, and fielding of the system began in 1983.

Tube-Launched Optically-Tracked Wire-Guided (TOW) Antitank Missile. To be carried on the FVS (see above) and the M901 Improved TOW Vehicle, this missile's warhead can penetrate (from the front) most main battle tanks from 3,000 meters. Once launched, it must be guided by a gunner, who maintains the crosshairs of the sight on the target. As the gunner tracks the target, a computer in the launcher sends corrections to the missile through fine wires. The TOW missile has been in the Army's inventory for many years; current plans call for improvements in the lethality of the warhead.

Combat Support Equipment

High Mobility Multipurpose Wheeled Vehicle. Also called the HMMWV, this new vehicle is designed to replace jeeps and other comparable light transport. Initial production began in fiscal year 1983 and plans call for fielding to begin in fiscal year 1985.

Single Channel Ground and Airborne Radio System (SINCGARS). This next generation of VHF-FM combat radios will be used throughout the battlefield. SINCGARS will be lightweight and able to provide secure voice transmission. Initial production began in December 1983, and current plans call for fielding in the mid-1980s.

CHAPTER II. THE ARMY'S ABILITY TO MEET STATUTORY THRESHOLDS

The language in the current law pertaining to equipping POMCUS sets 5 and 6 in conjunction with active-duty and reserve forces is vague. The law only requires that the 70/50 thresholds be maintained before an item of equipment can be placed in POMCUS. The language does not specify, for example, whether the percentages apply to wartime requirements or to peacetime levels, which may be lower. For this study, the Congressional Budget Office assumes that the percentages apply to wartime requirements. More important, the language does not state whether high-priority active units in such forward deployed areas as Europe or Korea must be fully equipped—as they usually have been in the past—or whether these units too must only meet the 70 percent requirement.

To assess the Army's ability to meet the statutory thresholds, this chapter considers two possible interpretations of the thresholds that differ in how equipment would be distributed among active and reserve units. Under the more demanding interpretation, roughly consistent with current Army objectives for equipment distribution, the Army would be prevented from transfering to POMCUS many types of combat support equipment and several types of combat equipment. Under the less demanding though still stringent interpretation, however, the study finds that—except for a few types of equipment, particularly combat support equipment—the Army would not be prevented from placing materiel into POMCUS between now and 1989.

ANALYTIC METHOD AND KEY ASSUMPTIONS

Both the active and reserve Army forces require numerous types of equipment: combat items such as tanks and howitzers to provide firepower; and combat support items, such as the trucks and radios that permit critical logistics and communications activities on the battlefield. On the basis of data from several Army sources, CBO compares numbers of key combat and combat support items on hand against the Army's stated wartime requirements for fiscal years 1984 and 1989. If the required 70/50 thresholds are met, the analysis then shows the amount of equipment available to meet

POMCUS requirements. 1/ The analytic results are separate for various categories of units—such as active and reserve—that are of particular interest to the Congress.

In fact, a typical POMCUS set may comprise at least 100 separate types of equipment, but CBO's analysis considers only a selection of 22 of the heaviest and most complex items. These include combat and combat support equipment, and they represent the materiel whose cost and priority for prepositioning are greatest. Indeed, these 22 items represent about 80 percent of the dollar value of the POMCUS stocks. (One reason for limiting the numbers of different types of equipment was the difficulty of assuring an accurate, consistent data base. Data for this effort came from several sources, including the Army's automated property book known as the Continuing Balance System-Expanded, the Army's Modernization Information Memorandum, and various requirements documents. 2/ CBO gave considerable effort to ensuring that equipment positions and projections in these various sources were consistent with one another and with the current budgetary plans.)

Several other limitations and important assumptions underlie CBO's analysis. Throughout this decade, the Army's inventory of equipment will undergo a series of important changes as modernized equipment is fielded into both the active and reserve Army forces. 3/ CBO's analysis assumes that the new deliveries are based on the President's budgetary proposals for the fiscal year 1985-1989 period. CBO cannot estimate costs relative to the May 1984 budget revision because five-year plans relative to that budget are

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1. The CBO analysis used the Army's requirements for equipment in POMCUS sets 1 through 6. It must be noted that these do not represent the full wartime requirements for the units that would deploy to their POMCUS equipment. Rather, the stated requirements are constrained by available warehouse space and thus represent some fraction of the total wartime requirements. This is significant because, in the event of a conflict, any equipment not already prepositioned in Europe would have to be transported with the Army's troops.

2. Data were provided that reflected Army assets for the forces, POMCUS sets, and war reserve stocks at the end of fiscal year 1983.

3. See Congressional Budget Office, Army Ground Combat Modernization for the 1980s: Potential Costs and Effects for NATO (November 1982).

not available. Since it takes about 24 months for the Army to receive equipment once it is ordered, appropriations in prior years also influence these deliveries.

The analysis assumes that, simultaneous with the fielding of new equipment, the Army will continue to remove certain items from its inventory after they have exceeded their useful lives. (The Army refers to such removals as "wash-outs".) The Army could, of course, delay wash-outs to increase its inventory. In addition, CBO assumes that the Army will continue to lose equipment through peacetime accidents; for the analysis, these attrition rates are based on historical averages. On the other hand, no losses are attributed to foreign military sales, which at times have caused sharp drawdowns in Army inventories.

The Army also plans to reorganize the structure and equipment of some of its light infantry divisions over the next five years. Since this decision was made recently, details are not yet available. Though the requirements of some items may change significantly, these initiatives should not dramatically affect the overall results of this analysis.

ALTERNATIVE DISTRIBUTION PLANS

To assess the effects of the 70/50 statutory thresholds, CBO considered two equipment allocation schemes, illustrated in the following text box. Case 1 generally follows the Army's objectives, which are much more stringent than the law's 70/50 thresholds. 4/ But Case 1 does indicate whether the Army could meet the legislated provisions without modifying its preferred approach for distributing equipment. Specifically, Case 1 attempts to provide to each major category of unit its full complement of

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4. In fact, Case 1 differs slightly from the Army's current, quite detailed policy. For example, the Army apparently intends to place new equipment in POMCUS stocks as the respective U.S.-based units receive the new equipment; so POMCUS would be built up in tandem with requirements for U.S.-based forces. The Army's approach is intended to ensure that in the even of war, units would "draw" equipment from POMCUS stocks identical to that used in training. Though these and other differences are not unimportant, they should not fundamentally alter the findings in this analysis. Most other specifics of Army policy are kept secret for reasons of national security and cannot therefore be spelled out here.

TWO ANALYTIC CASES FOR EQUIPMENT DISTRIBUTION

Case 1 follows the Army's objectives for distributing materiel by attempting to equip all the active-duty and reserve forces to 100 percent of their requirements starting with the highest-priority units (as ranked in the table below). Thus, Case 1 is much more stringent than current law and illustrates the Army's ability to meet the thresholds without modifying its preferred distribution scheme.

Case 2 departs from the Army's distribution objectives and assesses the extent to which the law itself, not the Army's likely scheme, is restrictive. It takes advantage of the statute's flexibility but adopts a strict interpretation. Specifically, Case 2 would still equip at 100 percent of requirements the forward deployed and rapid deployment forces and Army training units, because these units would fight early. The remaining active units based in the United States and any reserve units designated to go to POMCUS stocks would be equipped at 70 percent; all other reserve units would receive 50 percent. Case 2 would also allow the Army to redistribute equipment among units; excesses would be redistributed from oversupplied to undersupplied units.

Army Claimants on Equipment (In sequence of fill)	Percentage Goals for Distribution	
	Case 1	Case 2
Forward Deployed Forces	100	100 a/
Rapid Deployment Forces	100	100 a/
Active Training Base	100	100 a/
Active Units in United States	100	70 b/
Reserve Units in POMCUS	100	70 b/
All Other Reserve Units	100	50 b/
POMCUS Sets 1 through 4 (current)	100	100
POMCUS Sets 5 and 6 (under way)	100	100
War Reserve Stocks	100	100

SOURCE: Congressional Budget Office.

a. Items of equipment would be redistributed out of units that have in excess of 100 percent and into lower-priority units.

b. Items of equipment would be redistributed out of those units now above their 70/50 goals and into lower-priority units.

wartime equipment, starting with the highest priority units. Thus forward-deployed units in Europe and Korea would receive all their equipment first, followed by U.S.-based units assigned to the Rapid Deployment Forces (RDF), and so forth. Any equipment remaining would be assigned to lower-priority units, including many reserve units, the POMCUS sets, and war reserve stocks. In other words, Case 1 assumes that the Army does not withdraw equipment from higher-priority units to meet the needs of POMCUS stocks. Thus Case 1 indicates what would happen if the Army followed its preferred plans for distributing equipment and did not modify these plans to adhere to the law.

Case 2 assumes that the Army modifies its likely plan to reflect minimum requirements in the law but still adheres to a stringent interpretation of the law. Specifically, in Case 2 an attempt would be made to equip fully for war those forces that are forward deployed or earmarked for the RDF, since the DoD deems these forces to be critical in the earliest phase of a conflict. Units in the Army's training establishment would also, if possible, receive the full complement of equipment, since these units would be providing an initial base for mobilization. Consistent with the statute, the active U.S.-based forces remaining—some of which are the forces designated to deploy to POMCUS stocks—would be equipped at 70 percent of the wartime requirements if equipment inventories permitted. Beyond that, any reserve units designated to use POMCUS stocks would also receive 70 percent of their requirements—consistent with the active force counterparts. All remaining reserve units would receive an average of half of the equipment required. Remaining equipment, if there were any, would go to POMCUS and the war reserve stocks.

Perhaps most important, Case 2 would allow the Army to redistribute equipment—meaning that units with equipment in excess of thresholds could supply units that are short—which is not assumed under Case 1. Thus, for example, active-duty units in the United States equipped at more than 70 percent but that can, by law, have less could transfer their surpluses to other units or to POMCUS. In reality, the Army probably would not redistribute equipment around the world, however. But since redistribution is not prohibited, assuming redistribution serves as one fair way to approximate current law and assess the effects.

ANALYTIC RESULTS OF CASE 1

Tables 1 through 4 present the analytic results for the 22 items of equipment. Results are presented first for the combat items of equipment, and next for the combat support items.

Combat Equipment

In fiscal year 1984, inventories of almost all the combat items of equipment dealt with in CBO's analysis would suffice to meet the Army's objectives for both active and reserve forces (see Table 1). This would greatly exceed the Congressionally mandated thresholds, however. After appropriate equipment was distributed to the active and reserve forces, the POMCUS stocks could be filled completely with most, though not all, types of combat equipment.

TABLE 1. CASE 1—ANALYTIC RESULTS FOR COMBAT EQUIPMENT ASSUMING ARMY OBJECTIVES FOR DISTRIBUTION, 1984 AND 1989

Combat Equipment	To Meet Thresholds		Percent To Meet POMCUS Requirements			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5-6	Sets 1-4	Sets 5-6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	Yes	100	100	89	0
M901 Improved TOW Vehicles	Yes	Yes	100	0	100	100
M113 Personnel Carriers	Yes	Yes	98	0	100	76
M1 Tanks	Yes	Yes	27	a/	95	0
MLRSs	Yes	Yes	0	a/	81	0
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

By 1989, inventories of most combat equipment would exceed 1984 levels, if projections of assets to be delivered over the next five years are borne out. Meantime, however, requirements for most of these combat items are also growing. Thus, by 1989, inventories of most combat items would still be adequate to meet the thresholds while allowing most, though again, not all, of POMCUS requirements to be met.

These generally favorable findings have few exceptions. The Bradley Fighting Vehicle System, for example, is the only combat item examined for which assets in fiscal year 1984 and those projected for fiscal year 1989 do not meet the thresholds for the active and reserve units. And three items, the M1 tank, the Multiple Launch Rocket System (MLRS) and the M109 howitzer, have assets enough to fill the active and reserve forces but no additional assets to fill POMCUS stocks.

Combat Support Equipment

For the combat support items included in the study, the picture is much worse (see Table 2). Thresholds for the active and reserve units would also be met in fiscal year 1984, assuming the Army's objectives for the distribution of combat support assets. But much less combat support equipment would be available for prepositioning in Europe after the active and reserve forces have been equipped. For several types of equipment, such as the cargo carrier, repair vans, and the five-ton truck fleet, the Army lacks additional assets even to begin filling POMCUS sets 5 and 6 in fiscal year 1984, even though it can meet the 70/50 thresholds.

By fiscal year 1989, the situation would worsen. Some additional combat support equipment would not meet the mandatory 70/50 thresholds, because requirements are increasing faster than numbers of assets. Two combat support items—the 2½-ton truck and the 1½-ton and 3/4-ton trailer series—are not being purchased and would receive no new assets over the five-year period. Indeed, these items would actually lose assets because of planned attrition following from retirement of equipment. Thus by 1989, most combat support equipment—unlike the combat equipment—would have fewer assets available to fill the POMCUS stocks requirements than in fiscal year 1984.

There are, of course, some exceptions to these generally unfavorable findings for combat support items. One of the 14 types of equipment included in this study meets the thresholds and equipment needs in 1984 and 1989. One item even improves: projected deliveries of five-ton trucks over the next five years will satisfy the needs of all active and reserve forces as well as the requirements for four sets of POMCUS.

In general, though, the Army could not put much combat support equipment into POMCUS if it followed its objectives for distribution of equipment.

TABLE 2. CASE 1—ANALYTIC RESULTS FOR COMBAT SUPPORT EQUIPMENT ASSUMING ARMY OBJECTIVES FOR DISTRIBUTION, 1984 AND 1989

Combat Support Equipment	To Meet Thresholds		Percent to Meet POMCUS Requirements			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5-6	Sets 1-4	Sets 5-6
HMMWVs	Yes	Yes	85	0	61	0
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	93	0	72	0
M577 Command Posts	Yes	Yes	85	0	88	0
2½ Ton Trucks	Yes	Yes	100	100	64	1
Forklifts	Yes	Yes	80	2	21	1
Trailers	Yes	Yes	68	3	41	1
Repair Vans	Yes	Yes	63	0	42	2
Five-Ton Trucks	Yes	Yes	50	0	100	24
Ten-Ton Trucks	No	Yes	1	0	a/	0
15 Kilowatt Generators	Yes	No	100	100	16	1
Sincgars Radios	Yes	No	65	1	36	a/
M88 Recovery Vehicles	Yes	No	53	6	46	1
Semitrailers	No	No	17	0	6	0

a. Less than 0.5 percent.

ANALYTIC RESULTS OF CASE 2

If the Army departs from its anticipated distribution plan and adopts the current statutory minimum requirements—even a stringent interpretation of those minimums—then the situation would improve, especially for combat support items. Improvements would occur because the Army, under this second case, would have to provide less equipment to some active and reserve units and could redistribute assets from higher- to lower-priority units.

Combat Equipment

The items in Table 3 displayed in bold type show improvements under Case 2 in five of the eight types of combat equipment dealt with in this analysis. Thus, by 1989, the Army both would meet the 70/50 thresholds for combat equipment and would fill POMCUS requirements in all but two cases. Still, there would not be enough assets to allow the Bradley Fighting Vehicle to meet the thresholds. And inventories for the M109 howitzer would meet the 70/50 thresholds, but they would not have enough equipment to meet more than 50 percent of the requirements for POMCUS sets 5 and 6.

TABLE 3. CASE 2--ANALYTIC RESULTS FOR COMBAT EQUIPMENT ASSUMING STRINGENT INTERPRETATION OF APPROPRIATIONS LANGUAGE

Combat Equipment	To Meet Thresholds		Percent To Meet POMCUS Requirements			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5-6	Sets 1-4	Sets 5-6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	Yes	100	100	100	50
M901 Improved TOW Vehicles	Yes	Yes	100	100	100	100
M113 Personnel Carriers	Yes	Yes	100	100	100	100
M1 Tanks	Yes	Yes	76	a/	100	100
MLRSs	Yes	Yes	83	a/	100	100
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

Combat Support Equipment

For combat support items improvements would be more dramatic (see items in bold type in Table 4, which identifies all improvements). In many

cases, additional assets would be available for POMCUS stocks. Specifically, 12 of the 14 types of combat support equipment dealt with in this analysis would have more stocks in POMCUS in Case 2 than in Case 1. Thus, in contrast to Case 1, POMCUS requirements for most types of combat support equipment could be at least partially filled by Case 2.

TABLE 4. CASE 2—ANALYTIC RESULTS FOR COMBAT SUPPORT EQUIPMENT ASSUMING STRINGENT INTERPRETATION OF APPROPRIATIONS LANGUAGE

Combat Support Equipment	To Meet Thresholds		Percent to Meet POMCUS Requirements			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5-6	Sets 1-4	Sets 5-6
HMMWVs	Yes	Yes	100	100	100	100
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	100	0	89	0
M577 Command Posts	Yes	Yes	100	100	100	100
2½ Ton Trucks	Yes	Yes	100	100	100	100
Forklifts	Yes	Yes	100	100	100	64
Trailers	Yes	Yes	100	100	41	1
Repair Vans	Yes	Yes	100	100	100	100
Five-Ton Trucks	Yes	Yes	67	0	100	100
Ten-Ton Trucks	No	Yes	1	0	45	0
15 Kilowatt Generators	Yes	Yes	100	100	18	0
Sincgars Radios	Yes	Yes	100	100	57	0
M88 Recovery Vehicles	Yes	No	62	6	46	1
Semitrailers	No	No	17	0	6	0

CHANGED ASSUMPTIONS

All the results detailed above assume that procurements planned in the 1984 budgetary proposal are realized, and that the thresholds specified last year by the Congress remain in effect. Yet fiscal constraints may prevent

the Army from realizing its 1984 planned procurements. Moreover, an Army study suggested thresholds higher than those in current law. 5/ Chapter III examines the effects of altering these assumptions.

5. See Headquarters, Department of the Army, Deputy Chief of Staff for Operations and Plans, Reserve Component Minimum Equipment Levels for Training (RC MELT) (3 April 1980).

CHAPTER III. THE EFFECTS OF SLOWED WEAPONS PROCUREMENT AND RAISED EQUIPMENT THRESHOLDS

How would slowed rates of weapons procurement or higher equipment thresholds for the Army's active and reserve forces affect the Army's ability to place equipment in POMCUS? The Congressional Budget Office's analytic results suggest that lower rates of equipment procurement than planned by the Administration—specifically no increases beyond those the Congress approved for 1984—would further restrict the Army's ability to equip POMCUS, but not to any great degree. Requiring thresholds higher than 50 percent for reserve units—as a 1980 Army study suggested might be needed—would more significantly restrict the ability to place equipment in POMCUS. 1/ Both changes occuring simultaneously could seriously reduce the volume of equipment available to POMCUS.

REDUCED PROCUREMENT

For the fiscal year 1985-1987 period, the Administration is requesting $9.7 billion to purchase 20 of the 22 items of equipment included in this study (the other two are not being purchased). 2/ With Congressional debate concerning reduction of the Administration's defense request still ongoing, future procurement of some of these items may still be affected. Indeed, under the Administration's 1984 budgetary amendment for fiscal year 1985 submitted in May, procurement of three of these items was reduced. 3/ This section therefore examines the effects of procurement reductions on the Army's ability to meet various equipment thresholds.

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1. See Headquarters, Department of Army, Deputy Chief of Staff for Operations and Plans, Reserve Component Minimum Equipment Levels for Training (RC MELT) (3 April 1980).

2. Only two items—2½-ton trucks and trailers—are not planned for procurement during the five-year period, 1985 to 1989.

3. The three systems in which reductions are proposed are five-ton trucks, M1 tanks, and Bradley Fighting Vehicles.

Key Analytic Assumptions. For many of the pieces of equipment considered for this study, five-year procurement plans are not routinely provided to the Congress. To illustrate the effects of reduced procurement, CBO assumed no increase in levels of procurement above those approved by the Congress for 1984. In years in which the Administration's five-year plan was below the 1984 level, the Administration plan was used. These assumptions represent a probable lower bound for procurement, since the Congress appears likely to provide some real growth in the defense budget. 4/

The analysis requires not only knowledge of how many pieces of equipment are procured but also of when they are delivered—another type of detailed information not routinely provided to the Congress. Thus, to develop a hypothetical reduced procurement scheme, CBO assumed that projected deliveries for fiscal year 1986 would continue through 1989. This implies an average lag of 24 months between the year of appropriation and the delivery of a weapons system.

Results. Reduced procurement would adversely affect—though not greatly—the Army's ability to meet the mandated equipment thresholds and to proceed with prepositioning equipment for POMCUS sets 5 and 6 by fiscal year 1989 (see Table 5). Rather than presenting detail for each weapon system (as was done in Chapter II), Table 5 summarizes the results; detailed tables appear in the Appendix. Besides displaying numerical comparisons of weapons systems available to POMCUS, Table 5 summarizes overall dollar shortfalls for the 22 items of equipment. CBO's dollar estimates of requirements to meet these shortfalls—ranging from $3.1 to $5.4 billion in 1989—have limitations in comparison with any particular Army budget, since those shown here reflect only the one-time costs of meeting shortfalls and do not take account of the added costs of building production facilities nor of the effects on unit costs associated with increased production. (These limitations are examined in greater detail in Chapter IV.)

If the Army were to distribute its equipment according to its "objective" plans—CBO's Case 1—but not get any increases in procurement, two of eight combat items and five of 14 combat support items would not meet equipment thresholds in fiscal year 1989. This represents a slight increase in the numbers of items failing to meet 70/50 equipment thresholds over

4. See Department of Defense Authorization Act, 1985, Report of the Committee on Armed Services of the House of Representatives and Omnibus Defense Authorization Act, 1985, Committee on Armed Services, United States Senate.

TABLE 5. NUMERICAL AND DOLLAR COMPARISON BY 1989 OF ADMINISTRATION'S PROCUREMENT PLAN WITH SLOWER PROCUREMENT RATE

Number of Items Not Qualifying		Dollar Shortfall (-) for POMCUS Sets 1 through 6 (In billions) a/
Combat	Combat Support	
CASE 1. ARMY DISTRIBUTION OBJECTIVE (70/50 thresholds, Administration's procurement plans)		
1	4	-5.0
(With reduced procurement)		
2	5	-5.4
CASE 2. STRINGENT INTERPRETATION OF LAW (70/50 thresholds, Administration's procurement plans)		
1	2	-3.1
(With reduced procurement)		
2	4	-3.7

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study: eight in the combat category and 14 in the combat support category.

a. Data represent the one-time costs of filling POMCUS sets 1-6 for items in CBO's study, assuming shortages implied by alternative distribution plans.

those implied in the Administration's 1984 procurement plan. Consistent with the results reported in Chapter II, the combat support equipment constitutes most of the items that could not be prepositioned. Because of reduced procurement, POMCUS stocks would also have less equipment available; under these distribution assumptions, the cost of the shortfall would increase by 8 percent—from $5.0 billion to $5.4 billion.

Results are similar under Case 2. With procurement reduced in this case, two of eight combat items and four of 14 combat support items fail to meet the thresholds. The dollar shortfall is $3.7 billion, or 19 percent higher. These numbers are worse than under the Administration's planned procurement; but the degradation is not so bad as would occur if the 70/50 thresholds were raised—as an Army study suggests may be needed. 5/

THE BASIS FOR 70/50 THRESHOLDS

In 1979, the Army testified before the Subcommittee on Defense of the House Appropriations Committee that, to equip POMCUS stocks, materiel would have to be withdrawn or diverted from units stationed in the continental United States. The Army planned to withdraw no more than 30 percent of the equipment in active units that are designated for POMCUS, nor more than 50 percent of the equipment in late-deploying reserve units. 6/ The figures cited were apparently based not so much on analysis but on the best military judgment about minimum levels of equipment needed for peacetime training.

Key Studies of Minimum Equipment Levels Required for Training. To assess the effects of equipment withdrawals on a force's peacetime readiness level, the Army completed two studies, one for the active component and one for the reserve component, in 1980. These were intended to establish minimum equipment levels for training, or "MELT" levels. While both MELT studies examined equipment levels needed for peacetime training, they took two distinct approaches. For one, a field test was conducted for the active units to measure whether tactical training proficiency could be maintained with levels of equipment reduced—specifically, at a reduction of 30 percent of a unit's required equipment. For the other, a survey was conducted of reserve units in which commanders were asked to define appropriate levels of equipment needed for training.

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5. See Headquarters, Department of Army, Deputy Chief of Staff for Operations and Plans, Reserve Component Minimum Equipment Levels for Training (RC MELT) (3 April 1980).

6. See Department of Defense Appropriations for 1980, hearings before U.S. House of Representatives, Committee on Appropriations, Subcommittee on Defense, 96th Congress, p. 872.

The Active-Force Test. Conducted at Fort Carson, Colorado, the field test for the active units involved reducing for roughly ten months the equipment holdings of three combat units and three combat support units. Though their equipment holdings were reduced, the personnel in these units were raised to 100 percent of the units' requirements—a total of about 3,200 people. A control group was also established, consisting of three combat battalions whose equipment holdings were not altered and whose personnel strength was set at 94 percent of full requirements. Over the training period, the test units were evaluated on the basis of such standard Army measures as the skill-qualification test; questionnaires were also circulated among the units. At the end of ten months, the equipment holdings of these units were increased to 100 percent of their respective requirements, and all units participated in a field training exercise in which performance was evaluated.

The results of the Fort Carson test indicated that training proficiency could be maintained with 70 percent of equipment requirements provided training time is increased and more resources for training are available. The test units succeeded largely because they were able to pool equipment among themselves and share it with other units—as is current practice in reserve units lacking equipment. Commanders participating in the active-duty test were not asked to consider the wartime capabilities of units equipped at reduced levels. Nor were they asked to identify appropriate overall equipment levels.

The test suggested that reduced levels of equipment did indeed cause problems. Some types of materiel—such as heavy construction equipment that was already scarce and available in very low numbers—could not feasibly be further reduced in numbers. Morale among junior officers and mid-level enlisted personnel sagged, because these people had to manage the details of sharing and planning training without full equipment. Finally, and perhaps most important, the test demonstrated only that peacetime training proficiency could be maintained with lower levels. If many or all units had their equipment reduced, and extra equipment was not available at the start of a war, those units' ability to fight would be impaired even if peacetime training were not. Nonetheless, the active-duty test did suggest that the 70 percent threshold for these units would not reduce peacetime training proficiency, provided resources and training time were not reduced.

The Reserve Survey. The reserve portion of the MELT test—consisting of a survey of 128 commanders to determine appropriate levels of equipment needed for training—reached a different conclusion. The study concluded that there is no appropriate level of equipment for all reserve forces, since these forces' missions and deployment times vary so widely.

The study did indicate, though, that withdrawing equipment to 50 percent of the unit's requirement (as was noted in the Army's testimony in 1979) would adversely affect the reserves' training and capabilities after mobilization. Finally, the commanders made three recommendations: to equip fully all reserve forces designated to deploy within 30 days after a mobilization; to equip at 70 percent all reserve forces that would deploy after the first 30 days following mobilization; and to equip at 70 percent those reserve forces designated for POMCUS (see Chapter II). This last recommendation is consistent with policies of active units.

The text of the study suggests that reserve commanders may have been concerned less about peacetime training than about mobilization requirements when citing the need for more than 50 percent of their equipment. The reserves peacetime training can often be accommodated by pooling equipment, which is especially feasible for the reserves because each unit trains for only one weekend a month. Indeed, of the 128 units surveyed, roughly one-third indicated that they currently pool equipment, and two-thirds indicated that they could contribute equipment to a pool. Looking toward mobilization, the commanders appeared to agree that, unless substantial equipment were available to fill units holding only 50 percent of their requirements, the reserves' wartime capabilities could be degraded.

The reserve MELT study—gleaning only the assessments of commanders, who naturally have a strong interest in fully equipping their units—contained no field test with objective measures. If the Congress sought more information about minimum equipment needs for the reserves, it might be useful—though difficult—to conduct such a test. 7/

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7. Obtaining a statistically valid test from the reserves in a one-year period could be difficult, however, since these units typically undergo an annual training period equivalent to 38 days. Thus, more than one year of reserve training might be needed to amass enough data to measure proficiency. For example, reserve companies or batteries are evaluated externally once every two years. Reserve units rarely train at battalion level; at present, only field artillery battalions are required to be evaluated externally once every three years. In comparison, all active battalions are typically evaluated under the Army's Training and Evaluation Program once a year. Further, it could be difficult to standardize a reserve "test" group, since there are wide variances in reserve units' distances to training sites, present equipment holdings, and reserve units' ability to pool equipment.

Subsequent Testimony. After the MELT studies were completed, the Army again appeared before the Congress to explain that its method for withdrawing equipment from U.S.-based units to fill POMCUS would follow these guidelines: it would withdraw up to 30 percent of equipment in active units designated for POMCUS and up to 50 percent of equipment in late-deploying reserve units. 8/ Thus, the Army apparently did not accept the conclusions of the MELT studies, at least not for reserve units. The Army offered no official explanation of why it did not adopt the recommendations. Nonetheless, in 1981, the Army terminated the program of withdrawing equipment from units and decided to fill POMCUS stocks from newly purchased equipment. This was to avoid further drawdowns of equipment but still left some units equipped below both the 70/50 and recommended MELT thresholds.

CASE 3—HIGHER THRESHOLDS SUGGESTED BY THE MELT STUDIES

Using the recommendations of the MELT studies, CBO has constructed a Case 3 representing the MELT thresholds. This allows an assessment of the Army's present and future abilities to equip forces at higher levels than those contained in current law.

The higher thresholds would require that all reserve components be equipped at least at 70 percent; early-deploying reserve units would receive 100 percent of their requirements. The detailed assumptions are shown in Table 6.

The MELT thresholds would restrict the Army's ability to place equipment in POMCUS. Restrictions would be greater than those imposed by Case 2, the stringent interpretation of the mandated 70/50 threshold (see Chapter II). But they would roughly resemble restrictions under Case 1 approximating the Army's distribution objective. This suggests that, at least in terms of restrictions on equipping POMCUS, adhering to the MELT thresholds would be similar to adhering to the Army's distribution objective.

Under the MELT thresholds, a number of items of equipment would fail to meet minimum active and reserve thresholds and therefore would be unavailable to POMCUS. By 1989 under MELT, three of eight pieces of

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8. See Department of Defense Authorization for Appropriations for fiscal year 1982. Hearings before the Committee on Armed Services, U.S. Senate, 97th Congress, First Session, Part II, pp. 679-680.

TABLE 6. CASE 3—MELT STUDY THRESHOLDS

Army Claimants on Equipment (In sequence of fill)	Percentage Goals for Distribution
Forward Deployed Forces	100
Rapid Deployment Forces	100
Active Training Base	100
Active Units in POMCUS	70
Early Deploying Reserve Units	100
Reserve Units in POMCUS	70
All Other Reserve Units	70
POMCUS Sets 1-4	100
POMCUS Sets 5-6	100
War Reserve Stocks	100

SOURCE: Congressional Budget Office.

combat equipment and eight of 14 pieces of combat support equipment would not meet minimum thresholds. These numbers are higher than in either Case 1 or Case 2.

With the MELT thresholds, dollar shortfalls, which represent overall effects on POMCUS, would be higher by 61 percent than under Case 2—that is, $5.0 billion as opposed to $3.1 billion. Interestingly, though, dollar shortfalls under the MELT and Case 1 objectives are essentially the same. This would be so even though more pieces of equipment would fail to meet the thresholds under the MELT thresholds. As it turns out, those extra exclusions, while they barely meet the thresholds under Case 1, reflect equipment that is almost unrepresented in POMCUS. Thus the higher MELT thresholds would cause these types of equipment to slip below the thresholds but would not greatly change the amount of equipment in POMCUS. In dollar terms, then, MELT thresholds have essentially the same effect on POMCUS as adhering to the Army distribution objective, Case 1.

The Army could ease its problem under the MELT thresholds by allowing redistribution of assets (see Chapter II), analyzed here as Case 3a. As Table 7 shows, redistribution would mean that fewer types of equipment would fail to meet the thresholds. Further, it would reduce the dollar

TABLE 7. NUMERICAL AND DOLLAR COMPARISON OF CHANGED THRESHOLDS USING THE ADMINISTRATION'S PROCUREMENT PLANS, 1984 AND 1989

Number of Items Not Qualifying				Dollar Shortfall (-) for POMCUS Sets 1 through 6 (In billions) a/	
1984		1989			
Combat	Combat Support	Combat	Combat Support	1984	1989
CASE 1. ARMY DISTRIBUTION OBJECTIVE					
1	2	1	4	-2.5	-5.0
CASE 2. STRINGENT INTERPRETATION OF LAW					
1	2	1	2	-1.6	-3.1
CASE 3. MELT THRESHOLDS					
1	6	3	8	-2.5	-5.0
CASE 3a. MELT THRESHOLDS WITH REDISTRIBUTION					
1	5	2	6	-1.8	-3.9

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study: eight in the combat category and 14 in the combat support category.

a. Data represent one-time costs of filling POMCUS sets 1-6 for 22 items in CBO's study, assuming shortages implied by alternative distribution plans.

shortfall from the $5.0 billion of Case 3 to $3.9 billion. Case 3a does assume, however, that equipment would be moved from unit to unit, a cumbersome and expensive process. Thus, it may not be realistic and—as discussed in Chapter II—redistribution is not assumed to be an Army objective.

A COMBINATION SCENARIO—REDUCED PROCUREMENT AND HIGHER THRESHOLDS

The combination of procurement remaining at 1984 levels and the higher MELT thresholds for the reserves would seriously affect plans to expand the POMCUS program. Table 8 shows that, in this instance, three of eight combat items and fully ten of 14 combat support items would fail to meet the thresholds in 1989. Furthermore, even those combat support items that met the thresholds would often have little equipment in POMCUS (tables in the Appendix show details). As a result, the dollar shortfalls would reach $5.4 billion.

The combination of reduced procurement and higher thresholds would effectively bar placement of most major types of combat support items in POMCUS sets 5 and 6. Even though many combat items could still be placed in sets 5 and 6, the Army could decide that so unbalanced a plan—which would leave much combat materiel in the POMCUS sets but little equipment to support them—could make pursuit of POMCUS sets 5 and 6 undesirable.

TABLE 8. EFFECTS OF REDUCED PROCUREMENT IN 1989 AND MELT THRESHOLDS

Number of Items Not Qualifying 1989		Dollar Shortfall (-) for POMCUS Sets 1 through 6 (In billions) a/
Combat	Combat Support	
	MELT THRESHOLDS (Administration's procurement plan)	
3	8	-5.0
	MELT THRESHOLDS (Reduced procurement)	
3	10	-5.4

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study: eight in the combat category and 14 in the combat support category.

a. Data represent the one-time costs of filling POMCUS sets 1-6 for 22 items in CBO's study, assuming shortages implied by alternative distribution plans.

CHAPTER IV. COSTS TO MEET ARMY EQUIPMENT NEEDS

Because the Army's inventories of materiel cannot fill all of its requirements, some Members of the Congress have argued that additional equipment needed to fill POMCUS stocks should be purchased rather than withdrawn or diverted from active and reserve forces. Though more costly than diverting equipment from other forces to POMCUS, this approach would minimize the risk of underequipped U.S. forces in a European conflict. With POMCUS stocks fully equipped and no materiel diverted from mobilizing units, U.S.-based forces deploying to those stocks would not be slowed by transporting equipment with them. Moreover, equipment left behind by units deployed to POMCUS stocks could be redistributed to alleviate existing equipment shortages throughout the Army. Thus, active and reserve units would be better prepared for postmobilization needs.

To aid the Congress in judging whether to buy extra materiel to fill POMCUS or other needs, this chapter details the costs of meeting the Army's equipment needs by fiscal year 1989. (Costs in this chapter are expressed as additions to spending planned in the Administration's 1984 budgetary proposal. CBO cannot estimate costs relative to the May 1984 revised proposals, since five-year plans relative to that budget are unavailable.)

RESULTS OF THE COST ANALYSIS

Analysis suggests that the one-time added costs of filling shortages in 1989 for the 22 items of equipment CBO has analyzed range from $2.7 billion to $17.5 billion (in constant 1985 dollars). The range reflects choices about which equipment thresholds might be chosen and which forces and stocks filled. These one-time added costs would, of course, have to be met in smaller annual increments, not in one year, because of the delays entailed in increasing equipment production.

DETERMINING FACTORS—WHAT UNITS TO FILL AND WHAT CONSTITUTES FILLING

The costs of meeting equipment shortfalls would depend on which equipment thresholds were chosen and which forces and stocks filled. To illustrate the potential effects on costs, this study considers the costs of filling three different groups of forces and stocks. The Army could choose

to fill the needs of one or more of these groups, depending on the emphasis of policy.

First, the Army could fill all equipment needs of its active and reserve units. This would be consistent with an emphasis on peacetime training and a decision to hold to a minimum the risk that mobilized active and reserve units have inadequate levels of equipment.

Second, the Army could fill its POMCUS requirements. This course would be consistent with a desire to speed deployment of units to Europe and to ensure that, once there, they would be fully equipped. It would also be consistent with a political judgment that the POMCUS program is a national effort whose requirements are imposed on the Amy because of the importance of the POMCUS program to NATO.

Finally, the Army could meet its needs to stockpile equipment that it would expect to lose in the early days of a major war before more could be produced. Filling the war reserves (see Chapter I) needed in the first 30 days of such a war would reflect an emphasis on the ability to sustain combat.

Costs would also depend on what constitutes "full equipment." As suggested earlier, peacetime equipment needs can effectively be met even if units have less than full complements of equipment. The MELT studies examined in Chapter III suggest, for example, that peactime training needs of active-duty forces could be met with only 70 percent of their wartime equipment needs. Thus, CBO's study considers three different levels of fill for active and reserve units.

First, costs are given for Case 2, the stringent interpretation of current law—t.iat is, holding to at least the 70/50 thresholds. Next costs are given for Case 3, consistent with the MELT studies—that is, filling active and reserve forces to at least 70/70 thresholds. Finally, costs are provided for Case 1, which would fully fill the Army's equipment needs.

These cost estimates hve some important limitations. First, the choice to analyze only 22 items of equipment: costs for all POMCUS items would be higher, though the 22 items in this study do constitute 80 percent of the costs of POMCUS stocks. 1/ Also, the analysis shows one-time costs,

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1. As noted earlier, requirements for POMCUS are constrained by projections of available warehouse space in fiscal year 1989.

not the gradual phase-in that would occur over five years. Finally, CBO did not assess whether current production capacity could accommodate these increases. Thus, estimates do not reflect reductions in unit costs that could occur if production were increased, nor increases in costs needed to augment production capacity.

ADDED COSTS

Costs for meeting the full 1989 equipment needs of active and reserve units only could be as low as $2.7 billion (see Table 9). This estimate derives from constraining "full" equipment according to a stringent interpretation of current law, which allows some reserve and active units to be filled at only 50 percent and 70 percent of requirements. Costs would be $8.6 billion if all wartime requirements were assumed to be fully met.

Costs only to meet POMCUS needs—but fully—for the 22 items of equipment considered range from $3.1 billion to $5.0 billion. (Costs of filling POMCUS stocks presented here are identical to those discussed in Chapters II and III.) The lower number assumes that POMCUS is filled and active and reserve units' needs met according to the stringent interpretation of the 70/50 thresholds. The higher number assumes a 100 percent fill not only for POMCUS but for active and reserve units as well. Added costs are higher in the 100 percent case, because more equipment purchased under planned budgets is diverted to meet 100 percent of active and reserve needs and thus less is left for POMCUS.

Costs of having enough equipment on hand to provide combat replacements during the first 30 days of a major war in Europe range from $2.9 billion to $3.9 billion. Again, all these numbers assume that 100 percent of 30-day war reserve needs are met. The lower costs assume war reserve needs are met, as are 70 percent and 50 percent of active and reserve needs. The higher number assumes that war reserve needs are met in addition to 100 percent of active and reserve needs.

Finally, if all three needs were met—active and reserve units, POMCUS, and 30 days of war reserves—total added costs would range from $8.7 billion to $17.5 billion. Even the $17.5 billion is not the upper limit for added costs of equipping the Army fully. More materiel other than the 22 items treated here would add to cost increases. Moreover, some definitions of "full equipment" could include war reserves for as long as 180 days.

TABLE 9. ADDED COSTS TO FILL ARMY EQUIPMENT NEEDS BY FISCAL YEAR 1989
(In billions of 1985 dollars)

Units and Categories (In sequence of fill)	Case 1		Case 2		Case 3	
	Percent Fill	Added Costs	Percent Fill	Added Costs	Percent Fill	Added Costs
Active and Reserve Units						
Forward Deployed	100		100		100	
RDF	100		100		100	
Training Base	100		100		100	
Active Units in POMCUS	100	8.6	70	2.7	70	6.4
Active Units in United States	100		70		70	
Reserve Units in POMCUS	100		70		70	
Other Reserve Units	100		50		70	
POMCUS Sets 1-6	100	5.0	100	3.1	100	5.0
30 Days of War Reserves	100	3.9	100	2.9	100	3.9
Total		17.5		8.7		15.3

SOURCE: Congressional Budget Office.

NOTE: Data refer to 22 equipment items included in CBO study.

APPENDIXES. CBO ANALYSIS OF THREE POMCUS CASES

The following pages provide the detail underlying the CBO's analysis of the Army's ability to meet the equipment thresholds of 70/50 (see Chapter I) as contained in current law. They also document analysis of two major variations, namely reducing procurement by 1989 and raising equipment thresholds to the "MELT" levels. Details are broken down by individual weapons systems. (Systems that may not be familiar or self-explanatory are described in the Glossary in Chapter I.)

Analysis of Cases 1 and 2 is provided first. Bold type in the Case 2 tables indicates changes from Case 1. In each of the major variations that follow--Cases 3 and 3a—asterisks (*) indicate changes by weapons system from the respective base cases (that is, Case 1 or Case 2). All references to Sincgars radios imply families of radios to be replaced.

CASE 1

Army Objectives For Distribution

Combat Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	Yes	100	100	89	0
M901 Improved TOW Vehicles	Yes	Yes	100	0	100	100
M113 Personnel Carriers	Yes	Yes	98	0	100	76
M1 Tanks	Yes	Yes	27	a/	95	0
MLRSs	Yes	Yes	0	a/	81	0
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

CASE 1

Army Objectives For Distribution

Combat Support Equipment	Meets Thresholds 1984	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1984 Sets 1-4	1984 Sets 5&6	1989 Sets 1-4	1989 Sets 5&6
HMMWVs	Yes	Yes	85	0	61	0
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	93	0	72	0
M577 Command Posts	Yes	Yes	85	0	88	0
2½ Ton Trucks	Yes	Yes	100	100	64	1
Forklifts	Yes	Yes	80	2	21	1
Trailers	Yes	Yes	68	3	41	1
Repair Vans	Yes	Yes	63	0	42	2
Five-Ton Trucks	Yes	Yes	50	0	100	24
Ten-Ton Trucks	No	Yes	0	0	0	0
15 Kilowatt Generators	Yes	No	100	100	16	1
Sincgars Radios	Yes	No	65	1	36	0
M88 Recovery Vehicles	Yes	No	53	6	46	1
Semitrailers	No	No	17	0	6	0

CASE 2

Stringent Interpretation of Current Law

Combat Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
	1984	1989	1984		1989	
			Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	Yes	100	100	100	50
M901 Improved TOW Vehicles	Yes	Yes	100	100	100	100
M113 Personnel Carriers	Yes	Yes	100	100	100	100
M1 Tanks	Yes	Yes	76	a/	100	100
MLRSs	Yes	Yes	83	a/	100	100
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

CASE 2

Stringent Interpretation of Current Law

Combat Support Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
HMMWVs	Yes	Yes	100	100	100	100
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	100	0	89	0
M577 Command Posts	Yes	Yes	100	100	100	100
2½ Ton Trucks	Yes	Yes	100	100	100	100
Forklifts	Yes	Yes	100	100	100	64
Trailers	Yes	Yes	100	100	41	1
Repair Vans	Yes	Yes	100	100	100	100
Five-Ton Trucks	Yes	Yes	67	0	100	100
Ten-Ton Trucks	No	Yes	0	0	45	0
15 Kilowatt Generators	Yes	Yes	100	100	18	0
Sincgars Radios —	Yes	Yes	100	100	57	0
M88 Recovery Vehicles	Yes	No	62	6	46	1
Semitrailers	No	No	17	0	6	0

CASE 1

Army Objectives For Distribution

REDUCED PROCUREMENT

Combat Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	100	100
M110 Howitzers	Yes	100	100
M109 Howitzers	No*	0	0
M901 Improved TOW Vehicles	Yes	100	100
M113 Personnel Carriers	Yes	100	76
M1 Tanks	Yes	95	0
MLRSs	Yes	81	0
Bradley Fighting Vehicles	No	0	0

CASE 1

Army Objectives For Distribution

REDUCED PROCUREMENT

Combat Support Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
HMMWVs	Yes	35	0
M578 Recovery Vehicles	Yes	100	100
M548 Cargo Carriers	Yes	70	0
M577 Command Posts	Yes	88	0
2½ Ton Trucks	Yes	64	1
Forklifts	No*	21	0
Trailers	Yes	41	1
Repair Vans	Yes	42	2
Five-Ton Trucks	Yes	80	0
Ten-Ton Trucks	Yes	0	0
15 Kilowatt Generators	No	16	1
Sincgars Radios	No	36	0
M88 Recovery Vehicles	No	46	1
Semitrailers	No	6	0

CASE 2

Stringent Interpretation of Current Law

REDUCED PROCUREMENT

Combat Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	100	100
M110 Howitzers	Yes	100	100
M109 Howitzers	No*	0	0
M901 Improved TOW Vehicles	Yes	100	100
M113 Personnel Carriers	Yes	100	100
M1 Tanks	Yes	100	100
MLRSs	Yes	100	100
Bradley Fighting Vehicles	No	0	0

CASE 2

Stringent Interpretation of Current Law

REDUCED PROCUREMENT

Combat Support Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
HMMWVs	Yes	100	100
M578 Recovery Vehicles	Yes	100	100
M548 Cargo Carriers	Yes	89	0
M577 Command Posts	Yes	100	100
2½ Ton Trucks	Yes	100	100
Forklifts	No*	21	0
Trailers	Yes	41	1
Repair Vans	Yes	91	0
Five-Ton Trucks	Yes	100	100
Ten-Ton Trucks	Yes	0	0
15 Kilowatt Generators	Yes	18	0
Sincgars Radios	No*	36	0
M88 Recovery Vehicles	No	46	1
Semitrailers	No	6	0

CASE 3

"MELT" Thresholds

Combat Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	No*	100	100	89	0
M901 Improved TOW Vehicles	Yes	Yes	100	0	100	100
M113 Personnel Carriers	Yes	Yes	98	0	100	76
M1 Tanks	Yes	Yes	27	a/	95	0
MLRSs	Yes	No*	0	a/	81	0
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

CASE 3

"MELT" Thresholds

Combat Support Equipment	Meets Thresholds 1984	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1984 Sets 1-4	1984 Sets 5&6	1989 Sets 1-4	1989 Sets 5&6
HMMWVs	Yes	No*	85	0	61	0
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	93	0	72	0
M577 Command Posts	Yes	No*	85	0	88	0
2½ Ton Trucks	Yes	Yes	100	100	64	0
Forklifts	No *	No*	80	2	21	0
Trailers	No*	No*	68	3	41	1
Repair Vans	Yes	Yes	63	0	42	2
Five-Ton Trucks	No*	Yes	50	0	100	24
Ten-Ton Trucks	No	Yes	0	0	0	0
15 Kilowatt Generators	Yes	No	100	100	16	0
Sincgars Radios	Yes	No	65	1	36	0
M88 Recovery Vehicles	No*	No	53	6	46	1
Semitrailers	No	No	17	0	6	0

CASE 3a

"MELT" Thresholds with Redistribution

Combat Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
	1984	1989	1984		1989	
			Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	Yes	100	100	100	100
M110 Howitzers	Yes	Yes	100	100	100	100
M109 Howitzers	Yes	No*	100	100	89	0
M901 Improved TOW Vehicles	Yes	Yes	100	100	100	100
M113 Personnel Carriers	Yes	Yes	100	100	100	100
M1 Tanks	Yes	Yes	66	a/	100	100
MLRSs	Yes	Yes	61	a/	100	100
Bradley Fighting Vehicles	No	No	0	0	0	0

a. None required.

CASE 3a

"MELT" Thresholds with Redistribution

Combat Support Equipment	Meets Thresholds		Percent of POMCUS Requirement Met			
			1984		1989	
	1984	1989	Sets 1-4	Sets 5&6	Sets 1-4	Sets 5&6
HMMWVs	Yes	No*	100	100	100	100
M578 Recovery Vehicles	Yes	Yes	100	100	100	100
M548 Cargo Carriers	Yes	Yes	93	0	72	0
M577 Command Posts	Yes	Yes	100	100	89	0
2½ Ton Trucks	Yes	Yes	100	100	64	0
Forklifts	No*	Yes	80	2	24	0
Trailers	Yes	No*	68	0	41	1
Repair Vans	Yes	Yes	100	100	46	0
Five-Ton Trucks	No*	Yes	50	0	100	100
Ten-Ton Trucks	No	Yes	0	0	0	0
15 Kilowatt Generators	Yes	No*	100	100	16	1
Sincgars Radios	Yes	No*	91	1	36	0
M88 Recovery Vehicles	No*	No	53	6	46	1
Semitrailers	No	No	17	0	6	0

CASE 3

"MELT" Thresholds

REDUCED PROCUREMENT

Combat Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	100	100
M110 Howitzers	Yes	100	100
M109 Howitzers	No*	0	0
M901 Improved TOW Vehicles	Yes	100	100
M113 Personnel Carriers	Yes	100	76
M1 Tanks	Yes	95	0
MLRSs	No*	81	0
Bradley Fighting Vehicles	No	0	0

CASE 3

"MELT" Thresholds

REDUCED PROCUREMENT

Combat Support Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
HMMWVs	No*	35	0
M578 Recovery Vehicles	Yes	100	100
M548 Cargo Carriers	Yes	72	0
M577 Command Posts	No*	88	0
2½ Ton Trucks	Yes	64	0
Forklifts	No*	21	0
Trailers	No*	41	1
Repair Vans	No*	42	2
Five-Ton Trucks	Yes	80	0
Ten-Ton Trucks	No*	0	0
15 Kilowatt Generators	No	16	1
Sincgars Radios	No	36	0
M88 Recovery Vehicles	No	46	0
Semitrailers	No	0	0

CASE 3a

"MELT" Thresholds with Redistribution

REDUCED PROCUREMENT

Combat Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
M60 and M48 Tanks	Yes	100	100
M110 Howitzers	Yes	100	100
M109 Howitzers	No*	0	0
M901 Improved TOW Vehicles	Yes	100	100
M113 Personnel Carriers	Yes	100	100
M1 Tanks	Yes	100	100
MLRSs	Yes	100	100
Bradley Fighting Vehicles	No	0	0

CASE 3a

"MELT" Thresholds with Redistribution

REDUCED PROCUREMENT

Combat Support Equipment	Meets Thresholds 1989	Percent of POMCUS Requirement Met 1989	
		Sets 1-4	Sets 5&6
HMMWVs	No*	100	100
M578 Recovery Vehicles	Yes	100	100
M548 Cargo Carriers	Yes	71	0
M577 Command Posts	Yes	89	0
2½ Ton Trucks	Yes	64	0
Forklifts	No*	21	0
Trailers	No*	41	2
Repair Vans	No*	42	0
Five-Ton Trucks	Yes	100	100
Ten-Ton Trucks	No*	0	0
15 Kilowatt Generators	No*	16	1
Sincgars Radios	No*	36	0
M88 Recovery Vehicles	No	46	1
Semitrailers	No	6	0